

Title (en)
Centrifugal bloodpump

Title (de)
Zentrifugal-Blutpumpe

Title (fr)
Pompe à sang centrifuge

Publication
EP 0699447 A1 19960306 (DE)

Application
EP 95108362 A 19950601

Priority
DE 4430853 A 19940831

Abstract (en)
The centrifugal blood pump is esp. for heart replacement installations. It has a fluid and gas-tight closed housing with at least one blood inlet and one blood outlet. It contains a rotatably arranged pump rotor driven by an external drive motor using a magnetic coupling. The pump rotor (15) over its periphery has equally distributed ferromagnetic areas (17) influenced by permanent magnets (21) equally distributed on the periphery of a rotary coupling part (12,13,14,15,16,17,20) connected to the drive motor. For additional stabilisation against translation in the radial direction, the pump rotor is mechanically located, eg. by a bearing disc 24, without a seal within the pump housing in the blood throughflow area.

Abstract (de)
Bei der Zentrifugal-Blutpumpe mit in einem dicht verschlossenen Gehäuse (13) angeordnetem Pumpenrotor (15), der von einem außerhalb angeordneten Antriebsmotor (10) mittels magnetischer Koppelung antreibbar ist, sind die außen umlaufenden Permanentmagnete (21) als dünne Scheiben ausgebildet, die auf entsprechend dünne ferromagnetische Bereiche (17, 18) des Pumpenrotors (15) unter Vermeidung von Kippmomenten einwirken. Der Pumpenrotor (15) kann zusätzlich durch ein im blutdurchflossenen Innenraum des Pumpengehäuses ausgebildetes mechanisches Lager (24) gegen translatorische Bewegungen stabilisiert sein. <IMAGE>

IPC 1-7
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IPC 8 full level
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CPC (source: EP US)
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Citation (search report)
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